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300 Contribution to the Study of the Uru or Kot'suri Indians
[Contribution à l'étude des Indiens Uru ou Kot'suri?]

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Human Relations Area Files

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[Title page?]

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1. The plain of the Desaguadero seen from Iru-Iru in 1938.

[233]



2. Photograph taken from the same point in 1942. The Desaguadero is reduced to a plain of sand, without water.

Photos by J. Vellard

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Pl. I faces p. 145. /

The last group of Uru Indians living in the village of Iru-
Itu, or Angpake, on the banks of the Desaguadero, about 25
kilometers from Lake Titicaca, has almost entirely disappeared
in the course of the last years.

A long period of drought between 1940 and 1943 has
lowered the level of Lake Titicaca by more than three meters;
at many points the water has receded several hundred meters.

At the time of my first trip in 1938, the village of Iru-
Itu had about 100 inhabitants; the Desaguadero went through
vast swamps dotted with numerous ponds and lagoons with a
great abundance of totora beds */totoralis/*. In 1941 a plain
of sterile sand had replaced the swamps and fields of reeds;
the Desaguadero was reduced to a narrow, muddy ditch.

Because of this the Uru have ~~lost~~ practically all their
means of existence. The swamps covered with reeds, the
totora beds, furnished them with the *Scirpus* necessary to make
their fishing balsas and to cover their houses and served as
shelter for numerous aquatic fauna: fish, *sachas* (*Triche-
mycterus dispar* and *rivulatus*), bogas, *hipe*, *carache* (various
cretilas), and birds sought by the Indians for their meat and
eggs. Their entire economy, based partly on hunting and fish-
ing and partly on the sale of totora fishing balsas and mats to
the neighboring Indians, has thus been destroyed.

Many of the Uru are dead. Others, the young ones, have
dispersed, mingling with the neighboring Aymara groups;
some have joined the Lake Titicaca fishers. The old ones,
more attached to their customs and their */146/* traditions and
incapable of adapting themselves to new conditions of existence,
have remained in the dead village.

In 1944 most of the houses had been abandoned; the totora
roofs could not be repaired for lack of reeds, and many had
given way. Only 21 people remained in the village; several
women were of Aymara origin, and the few children were in
part Uru-Aymara half-breeds.

/146 cont./

[6]
[13] According to the latest news the group of Iru-Itu seems to be reduced to some 12 people, although since 1946 the level of the lake has risen considerably; in February 1947 it had already risen 90 centimeters. This rising movement is continuing, and the waters beds are slowly beginning to reform.

[73] The old Uru remembered having seen in their youth, around 1870, an even worse drought than that of these last years. But at that time they were more numerous and the group was able to subsist. Now it is so diminished to reconstitute itself and its disappearance seems definite.

101 I visited the Uru of Iru-Itu for the first time in 1938. During my stay in Bolivia from 1940 to 1944 I was in constant contact with them. Their misery and their decline did not allow me to glean important observations on their material culture, already studied by the numerous ethnographers who have stayed among the Uru of the Desaguadero. Their imminent disappearance made it necessary, however, to bring together everything which might still exist among them: anthropological observations, traditions, and linguistic records, in order to compare them with the other populations of the region and especially with the different groups of fishers on Lake Titicaca.

These are the results of this study, the publication of which we are beginning.

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Note I

Accounts and Conversations

114 The linguistic records at our disposal on the Uru are reduced to some quick observations and more or less expanded vocabularies gathered by travelers in the course of brief stays in the region of Iru-Itu. Métraux is the only one to have published texts in the Chipaya dialect. No text exists in the Iru-Itu dialect, and the best sources of linguistic information on

/147 cont./

114 this group are the handsome monograph of Créqui-Montfort and Rivet, Métraux's vocabulary, and, at a less important level, the various publications of Posnansky containing numerous words more or less well noted down and translated.

The conditions under which most of the documents on the Iru-Itu group were obtained largely explain the imprecision of the meaning of numerous words and the often very different notation on which Créqui-Montfort and Rivet rightly insist.

195 There is no doubt, however, that many of the words have a very broad meaning and that their pronunciation varies within rather large limits, especially with informants belonging to different generations, or influenced to varying extents by Aymara. One even notes considerable variations in the course of a conversation with one person.

126 During my long contact with the Uru, I collected an important vocabulary of more than 1,000 words, as well as numerous phrases making it possible to analyze the structure of the language.

128 The extent of this vocabulary and of the collection of phrases makes it impossible to publish them now. I have therefore been forced to make a selection of accounts and conversations obtained from my informants. These texts /148/ relate to the daily life of the Uru. Beyond their interest in this respect, they illustrate most of the ordinary grammatical forms. Study of them also permits a comparison with the only known Pukina text, that of Oré, which is much more extended than it had been possible to do with the documents at our disposal up to now. This comparison, which gives evidence of very close grammatical and lexicographic affinities, will be the subject of a special note in the second number of this journal.

115 Two informants were utilized in the course of our long
195 linguistic investigation. They belonged to two different generations and displayed considerable variations, not only in phonetics but also in vocabulary and syntax. Both spoke
191 Aymara, the younger one fluently, and the older rather badly;

/148 cont./

115
191 the former had had much more frequent contacts with the neighboring populations.

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191 Here I should note that Métraux's assertion in his 1937 work on the almost general usage of Aymara by the Uru of Iru-Iru, who "practically do not speak their old language any more," was clearly exaggerated. In 1938, alongside individuals who spoke Aymara fluently, numerous men knew only a few words of it, and most of the women did not know it at all. The only ordinary language in the village was Uru, but it is natural that in the course of a short stay with Aymara informants, a traveler would mainly have had contacts with natives who knew this language, which gives a false impression of the group as a whole.

114
191 Moreover, it is inexact to state that the Uru call their language Bukina or Pukina. This information was also given to me in 1938, during my first trip, by a Uru who spoke Aymara and even a few words of Spanish, and I published it in a small work on the Uru ("Les Indiens Uru du Desaguadero /The Uru Indians of the Desaguadero/," Boletim do Museu Nacional, Rio de Janeiro, 1939, XIV-XVII, 303-319). During my second stay I had an explanation /149/ of this declaration made by several Uru. All asserted to me that they did not know who the Pukina were and did not know of any people with this name, but a "mister" had said to them that this was the name of their language. It is not difficult to recognize in this connection Posnansky's intervention, of which it would be easy to cite other examples of the same kind.

115 My informants were the following:

114
191 Manuel Inta, apparently a pure-blooded Uru, a great-grandfather, who was almost 90 years old at the time of our investigation judging from the events at which he had been present in his youth. A robust man, he was still capable of making the trip on foot from La Paz to Tiñahuaco, 90 kilometers, in two days in order to save the price of his passage by train or bus, which had nevertheless been paid for him in

160 cont. /

15
[19] large part, and thus to the great dismay of the respectable
guardians of the ruins of Tiahuanaco who had accompanied him
to La Paz and whose watchfulness he tricked in order to enter
[21] his village alone. A very limited knowledge of Aymara, none
of Spanish or K'iche /Quechua/. An excellent informant.

Carlos Kipe, from 40 to 50 years old, one of the youngest
[23] men in the group. He displayed characteristics in his physical
appearance which led me to suspect a certain degree of Aymara
cross-breeding (see the 2nd note, in Physical Anthropology

[25] p. 30 f.). Besides he was an illegitimate son, born of an un-
[27] known father. Much more enterprising than Manuel Ito, he
spoke Aymara fluently, but another Spanish one K'iche. He
had frequent contacts with the neighboring Aymara populations
and, faced with the persistent drought, was thinking of leaving
[29] the to go live as a fisher at Copal. He also proved to be
an excellent informant, but his syntax was less pure and less
varied than that of Manuel Ito and his vocabulary poorer and
more mixed with Aymara; he did not use, or even did not
know, a certain number of words used by his companions.

195
[31] It is interesting to underline these differences in /195/
language between individuals of the same village, belonging
to two different generations. They show us to follow the
rapid evolution of languages submitted to oral tradition alone
without any movement to establish them.

115
Outside these two principal informants, we utilized other
inhabitants of the village, either for the general investigation
or for word comparison.

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[33] For each text we shall indicate the informant who pro-
vided it. These texts were gone over several times with the
informant in order to obtain as exact a transcription as possible.
Their translation was always checked in Aymara. Even so, in
the course of the same text, considerable variations in pro-
nunciation will be observed, which do not appear to follow any
definite rule. They indicate a certain phonetic instability,
more marked, of course, between different observers.

First part.

109 The system of phonetic notation used is that of the Institute of Linguistics of the University of Paris. The following remarks are necessary:

We have used, in addition to the more exclusive palatal k and the quasi-palatal k' , a very strong k'' , usually written down k_2 by students of Quotient and Symmetry. It corresponds to a forward quasi-palatal, French Ch or ch (as opposed to ch in the quasi-popular ch (German ch)) k is always used. Pages 111-116, except for items 11-15, which follow, are omitted in the manuscript as the foreign text.



3. A typical house in Kyaukse in 1940.



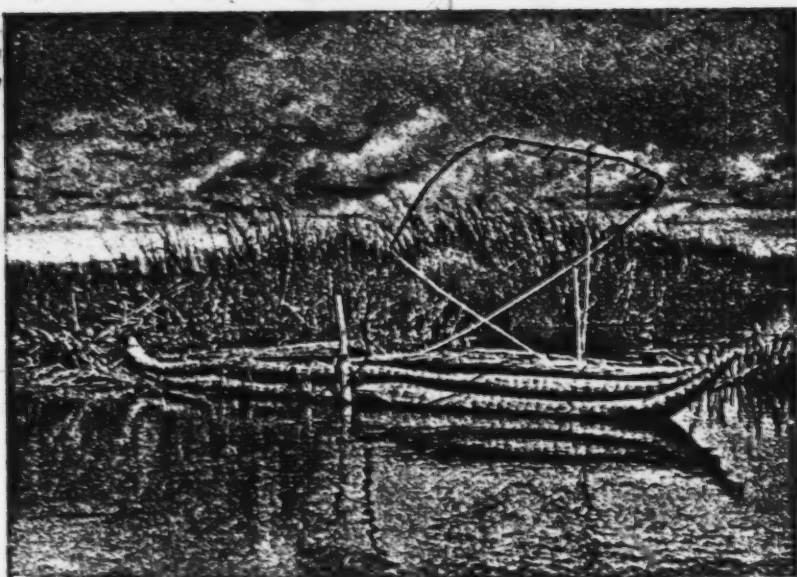
4. The same house in 1941: the high roof of bamboo shaped like a keel has collapsed and can no longer be repaired.

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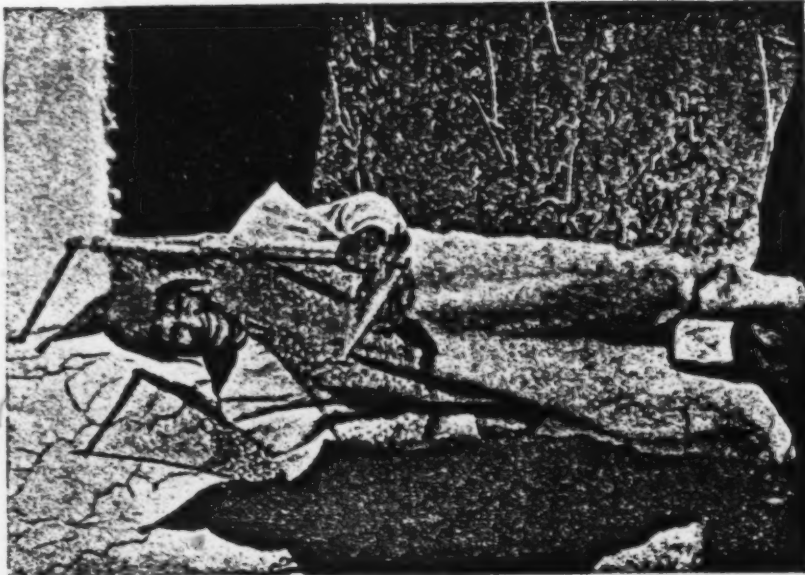


5. Balsas of totoras (1942).

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6. Balsa with large net (yak kaka). Account VI /see p. 16/.



7. Uru with small fish net (tum kaku).
Account III, 14 /see p. 12/.



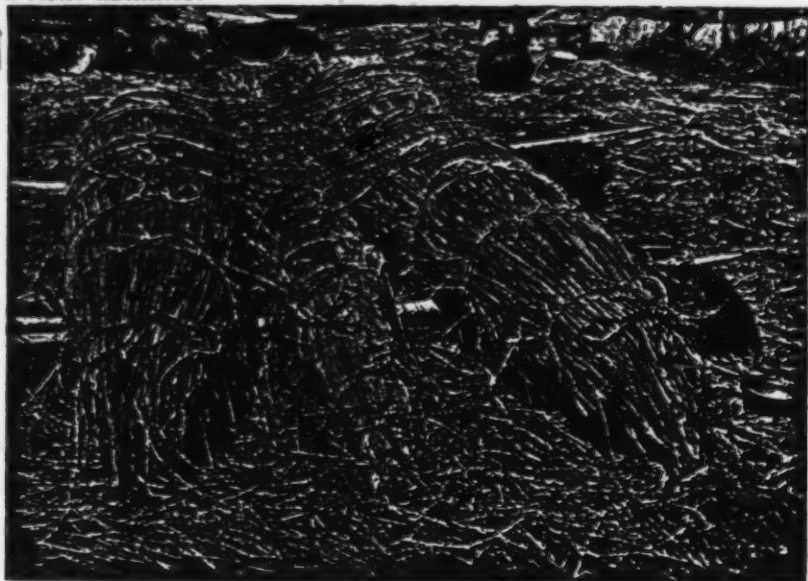
8. Uru with big fish spear (Account III, 20
/see p. 12/).

283
412



9. Fisher preparing straw ropes to make a balsa. He is using a stone hammer.

396
824



10. Construction of a balsa: preparation of the three totora cylinders: the heart and the two side parts.

/170/

1. The Misery of the Uru
(Account by Manuel Inta)

(See p. 151 /in the foreign text/)

000 /Note. As a result of the difficulty of obtaining the typographical signs for the exact transcription of the Uru words included in the remarks, we have been obliged to transcribe a certain number of words in an approximate fashion and more or less successfully. It will therefore not be surprising that there are differences of transcription between the texts, which have been reproduced by a photographic process, and the remarks. It goes without saying that only the transcription of the texts is exact./

Free Translation

- *539 1. We shall never be able to go from here; we all are too
931 much accustomed to be here since always. 2. But our fields
198 will give us very little. 3. This year is too dry and the potatoes
433 are not growing. 4. The frosts have burned everything.
511 5. That is why we are leaving. 6. Now what shall we do?
7. In the swamp which is drying up there are no more suche
(kind of fish). 8. There are no more reeds and there are no
more birds' eggs. 9. All the eggs have departed into the
great lake of Guaqui. 10. The fish have left for Guaqui.
11. How will we eat now? 12. If it rains enough this year
we shall live. 13. We shall all return to our village. 14. If
it does not rain (enough) we shall die. 15. We eat the little
potatoes which we cultivate for the people of another race (the
Aymara). 16. We earn them by cultivating for them.
17. There are few fish and we have only caught one. 18. We
shall sell it. 19. Thou hast seen how small it is. 20. It is
necessary to go far to fish. 21. We are accustomed to going
home at night. 22. We shall return home to sell (our catch).

/170 cont. /

* 539 23. We are going to sell them to the people of the other race,
 193
 178 at three for one real.

433
 511 /171/

Remarks

* 539 This account, dictated by an old Uru about 90 years old,
 193 Manuel Inta, is a commentary on the wide dispersal of the Uru,
 178 undoubtedly permanent, after a series of years of drought,
 161 1940 to 1946. In 1944 there were only a few old people in
 433 their old village of Iru-Itu. The drought had destroyed the
 vast swamps of the Desaguadero and their reed fields, the
 source of all the activity of these Indians, bringing about the
 disappearance of the conditions which had made it possible
 for them to maintain their ethnic individuality in the midst
 of the Aymara populations. These complaints express the
 bitterness of the old Urus, fishers and gatherers, obliged, in
 order not to starve to death, to change their economy, working
 [167] in the fields of their Aymara neighbors. The young Urus have
 dispersed, some having mingled with the Aymara or Amaracized
 fishers of Lake Titicaca, others having established themselves
 in Aymara villages or communities.

* 539 wáki, Bolivian village of Guaqui, on the small lake.
 193 òx'á, literally, "different," the people of another race, the
 193 Aymaras. Note the particle ču intercalated between the root
 [101] and the ending of the verb: Káya -čúčay, tánáču -čay, lúx-
káču -čay, in order to reinforce the idea expressed by the verb
 and to indicate a customary action. The particle ki intercalated
 between the root of the verb and the ending čay indicates the
 future. The verb Káči -čay means "to engage in business,"
 "to sell" as well as "to buy," or "to earn money." tumíni, a
 * 539 tomin (old Spanish coin): a word unknown to the present lake
 192 Aymaras but still used by some natives of the Puno region.

Note three other Hispanicisms: 1. kustúmbro, "custom";
 5. isú -čay, esto or eso, "that"; 17. ni -únu, "this alone,"
 from the Spanish uno, "one."

/171 cont./

- *539
192
193
1. píni means "many"; with hána it may be rendered by "no more"; učúmi, exclusive personal pronoun /172/ for the first person plural. 2. yalák, probably the Spanish chacra, "cultivated field"; the Uru do not have their own word to designate fields. 4. The ending čay added to a root gives it the verbal form. 6. xui, interrogative particle. 7. suche, small kind of sheatfish from the Titicaca region; it is the Trichomycterus dispar. 8. totorá, Scirpus totorá, the reeds of Lake Titicaca used by the Uru to build their balsas, cover their houses, and for other uses. 12. ke-, particle of repetition. 14. tòxša, literally "other persons," designates all men other than the Uru; nak' for nāka, plural form of pronouns.
- [136]
- [824]
- [101]

*539
396

II. Manufacture of Balsas from Totoras
(Account by Manuel Inta)

(See p. 154 /in the foreign text/)

Free Translation

1. Let us go, as is our custom, to find totoras to make a [283] balsa. 2. We are accustomed to go far to make the straw ropes /necessities/. 3. Three days are needed to dry (the straw ropes). 4. The straw ropes are well dried now. 5. Now all these totoras are well dried. 6. Let us make the balsa. 7. A man cuts the totora. 8. The totora is tied (in bunches). 9. Three have to be made (bunches of totora): the heart (the middle spindle) and the two side spindles of the balsa. 10. We tie (the spindles); now we are going to squeeze them together very tightly, at first it takes two men to squeeze it together. 11. We have the custom of sprinkling (the totora) with water so that it does not dry. 12. Now we are going to tighten; to tighten we are accustomed to use a hook. 13. We beat (the totora) with /173/ a rock (in order to compress it).

/173 cont./

- *539 14. We are going to place a rim of totoras. 15. He attaches
 [396] the rim of the balsa. 16. He tightens the rim of the balsa.
 17. We are going to finish. 18. (The totora) is still a bit
 loose; we are going to tighten it a bit more. 19. All is
 finished. 20. Now the balsa is ready. 21. Let us go fishing
 [501] with the new balsa. 22. We are not going to hoist a sail?
 23. We are not accustomed to use a sail; there is too little
 water. 24. We always use a boat hook manipulated by hand.
 [226] 25. Here is the stone which is attached to the large net so that
 the fish can enter. 26. The fish is going to enter (the net);
 now we are going to lift (the net) up and put it in the balsa.

Remarks

This text is divided into two parts. The first, 1 to 20, describes the making of balsas from totoras. The second is a succinct description of fishing with a net in the swamps of the Desaguadero.

- *539 To build their balsas the Uru use the Scirpus totora,
 396 which used to grow in abundance in the swamps of the
 [824] Desaguadero and at numerous points on the shores of Lake
 Titicaca. Two Indians work at the same time on the con-
 struction of a balsa. First they lay out the bunches of totoras
 [114] on the ground, from which they make three spindles the length
 of the balsa, two large side ones and a middle one which is
 shorter and thinner; this middle cylinder, the "heart of the
 balsa," used to stabilize the craft, has passed unnoticed by
 practically all the authors who have concerned themselves
 [171] with the Uru. Only the fishers on the lagoon of Arapa, to the
 north of Lake Titicaca, who speak Kešwa, build balsas, small
 and rather narrow, formed with two cylinders.

- [284] The totora of three cylinders is held in place with the
 aid of thin straw plaits (2-4), which hold the cylinders evenly
 between them. These straw ropes are tightened in a progressive
 and methodical fashion by two /174/ men, working alternately

/174 cont./

*539 on each side of the balsa (10, 12, 17) in order to make the
396 two large side cylinders equal in weight, bulk, and compression. This is the delicate part of the manufacture, on which the stability and quality of the craft depend. The Uru use wooden hooks for this job (12). At the same time they compress the totora with a stone hammer (13), adding or removing totora as necessary; they water it from time to time to prevent it from drying. When the work is finished the middle cylinder, the heart of the balsa, completely hidden between the side

[46] cylinders, is invisible. Depending on the size, the construction
*539 of a balsa takes an average of three to six days. The life of a
501 balsa is short; after having been wet they become heavy and rot inside; they are good for six months to one year in general.

The balsas used on the Desaguadero and on the low parts of the lake in the neighboring lagoons which are not very deep (Arapa, Unumayo) do not have sails (23), or only a very small sail, in contrast to the balsas on the large lake which they propel by sail. The Uru steer them with the help of a boat hook ending in three teeth, which they push against the muddy bottom (24). These boat hooks are identical to those of the [19] Guatos of upper Paraguay, who belong to the Nu-Arwak /Nu-Aruak/ linguistic group.

*539 From the point of view of grammar, note the frequent use
193 of the repetitive particle -ču-, indicating that the action expressed by the verb is habitual. Also note the repetitions of words or roots to reinforce the idea expressed (3-12, etc.)

The verb šičl' čay expresses the idea of carrying off, of lifting up, of raising (22-23); compare it with 4-5 of text III.

/175/

III. Fishing
(Account by Manuel Inta)

 (See p. 157 /in the foreign text/)

Free Translation

- *539
226
1. I left my house. 2. I went toward the lake. 3. I have been to catch fish. 4 I took a boat hook. 5. I took a large net. 6. We are accustomed to fish with this net.
 7. We are accustomed to go fishing at night as well as very early in the morning or evening. 8. We are accustomed to go with another person or even alone. 9. We are free to go fishing or not to go. 10. I got into this balsa. 11. We are accustomed to propel it with the boat hook. 12. We maneuver the boat hook by hand. 13. We are accustomed to put on our tunics now because of the mist. 14. We have taken way a net. 15. Thou, chase the fish with thy boat hook. 16. Me, I lift up the net. 17. There is a souche; a souche is swimming by. 18. We are going to catch it. 19. It is very close. 20. Stick it (with thy spear). 21. Hast thou caught it? 22. I have caught it. 23. We are accustomed to putting (the fish) in the balsa. 24. A souche has fallen into the water. 25. I have taken it out of the water. 26. Let us go elsewhere. 27. All the fish have left. 28. Let us go hunt for coots. 29. Let us rest; I am tired. 30. We are accustomed to hunting coots.
 - *539
223
 31. We are accustomed to follow them in flight. 32. We are accustomed to hitting them with the boat hook. 33. It has dived. 34. It is coming out of the water. 35. I shall catch the coot with my boleadores /bolas/. 36. It did not touch it. 37. Another will come and thou wilt catch it. 38. Yes. 39. It has come back. 40. We will set out again with the balsa. 41. Let us go fast, or else it will escape (outdo) us. 42. We have caught it. 43. We have caught its /176/ young ones. 44. Bite the coot at its head (to kill it). 45. Let us go

/176 cont. /

- *539
126
123 sell it. 46. We must return with this one; let's return.
47. There are no more. 48. We go along in vain. 49. We have looked everywhere; there are no more. 50. We are going to carry everything to the house.

Remarks

- *539
126
123 This text is divided into three parts. In a short introduction (1-9) the narrator explains the fishing customs of the Uru, and then he describes a day of fishing and hunting aquatic birds in the swamps of the Desaguadero: the departure (10-14), the work of the catcher, who hits the water with a boat hook to direct the frightened fish toward the nets (15-16); fishing for suche (Trichomycterus dispar), a silurus /sheatfish/, which is the largest fish in the lake, reaching 30/35 cm., captured by means of a long three-meter spear ending in multiple points (17-27); and lastly, hunting for coots (Fulica gigantea and Fulica americana) forced into flight and then killed with the boat hooks (30-34) or captured with bolas with wooden balls (35-42). The captured coots are killed by a bite at the head (44). Then comes the return (45-50). This account is very lively.

- *539
192
193 There are no special words for fishing or hunting; only the verb tána-čay, literally, "to take," is used.
From the point of view of grammar the text furnishes interesting verbal forms, in particular, the forms indicating the usual -čučay, as in the previous texts; the form -čáčay (46), implying the idea of obligation; the double use of the root (8) to reinforce the idea expressed by the verb. Moreover, the frequency of the euphonic letters s and l: 2, 5, 8, etc., should be emphasized.

This text contains two Hispanicisms: the first is very curious (8); in order to better render the idea of solitude, alone, absolutely alone, the narrator has repeated the word "one," /177/ but by pairing the Uru word tína, "alone," with the

/177 cont. /

*531 Spanish word unc /"one"/. In 9 the Spanish word voluntad
 196 (will) is deformed into puluntã, as y does not exist in Uru, but
 193 it keeps the Spanish tonic accent.

IV. Nocturnal Fishing (Account by Manuel Inta)

(See p. 161 /in the foreign text/)

Free Translation

- *539 1. We are accustomed to fish at night. 2. We are ac-
 246 customed to fish in darkness. 3. But how can one see at night?
 4. One can easily see the fish moving about. 5. We cover
 ourselves with the sail to keep from being cold.

Remarks

[130] The Uru often go fishing at night in their fishing enclosures,
 and in order not to suffer from the intense cold and the icy wind,
 they shelter themselves under the totora sails of their craft.

- *539 1. The form makã-xe, "by night," "in the darkness,"
 192 is analogous to tom-xe, "today," "on this day," and to num-
 193 xe, "by day." 3. kún, an interrogative particle, "how," is
 accompanied by the pure root of the verb. 4. kíre, "fish,"
 is often pronounced kíri. 5. sráp'-pa indicates finality and
 may be added either to a verb root or to a substantive form or
 adjective, as is the case here.

/178/

V. Nocturnal Fishing
(Account by Carlos Kispe)

(See p. 162 /in the foreign text/)

Free Translation

1. All is ready; we can leave now in the balsa. 2. This balsa has a very raised prow so that the very strong waves will not submerge it. 3. We are going to erect the mast. 4. We [502] are going to hoist the sail. 5. The wind is coming from another side; let us change (the orientation) of the sail. 6. The sail is swelling very much; the wind is strong. 7. We are going to lower the sail. 8. We are going to put a rock on the sail so that the wind does not carry it away. 9. We are going to place a piece of wood vertically. 10. We are going [502] to hang a pot (from it). 11. We are going to spread (on the water) (a bed) of totoras to light a fire (above). 12. The fire is burning; the water is going to boil and we shall drink.

Remarks

[502] In the first part of this text (1-6) the narrator describes the departure for fishing and the maneuvering of a balsa with a sail of the type used in certain parts of the Desaguadero with a simple mast; their raised prow permits them to withstand rather strong waves. The balsas on Lake Titicaca are larger, with a prow which is also raised, but with a double mast and a larger sail.

The second part (7-12) shows the preparations of the Uru for spending the night on the water. The balsa is halted in shallow water; the sail held by a large stone shelters the fishers from the wind. A boat hook placed in the mud is used to hang [312] a pot above /179/ a fire of totoras, lighted on a thick bed of reeds thrown on the water.

/179 cont./

*539 115 The whole of this text, the phonetics as well as the
191 vocabulary and syntax, is less correct than the accounts of old
Manuel Inta, who belongs to the generation prior (he is nearly
90 years old) to that of the new narrator (Carlos Kiske), who
is about 50 years old.

*539 191 1. puKáta is an Aymara word, a language which the in-
192 formant knows rather well; húxk'-čáč' for huxk'-ačáčay,
"we can depart." The narrator sometimes says čurk, and
sometimes čòrk or čark, literally, "large," "strong"; this
form indicates the superlative here. 3. The Uru have no
special word for the mast; they simply call it "the wood" of
the sail. 8. The correct form would be šaxka-čúčay.
9. The narrator moreover has a tendency to transform the final
-čay into -ča (6) or to elide it into áč' (1); he always omits it
with substantives and adjectives. 12. The informant says
Kās-si instead of the correct form k'wá-si, "water." He often
confuses č and i, sometimes saying čúke and sometimes čúki.

VI. The Fishing Enclosure (Account by Manuel Inta)

(See p. 163 /in the foreign text/)

Free Translation

*539 346 1. This is a fishing enclosure. 2. This enclosure is made
to catch fish. 3. We are accustomed to closing the entrance
(of the enclosure) with a net. 4. We lift the net quickly with
this stick. 5. On this river there is another net. 6. There
are enclosures for each of us, very far away from each other.
7. Thus each of us can fish.

/180/

Remarks

*539
306 The Uru build dams of totoras in a V-form on the Desaguadero, the point oriented toward the direction of the current. A narrow passage contrived at the point is closed at the time of fishing by means of a large circular net, the káku, installed on a balsa. Fishers standing on one or several balsas go downstream, beating the water with long poles furnished with a totora ball, in order to frighten the fish which, descending the river course, enter the enclosure and fall into the net placed at the point. Each Uru family has its fishing enclosure, very far away from those of its neighbors (6-7). The distribution of the location of these enclosures as well as the use of the totora fields which are used to make balsas was ruled by Uru customary law.

[823] 1. ti-ki or simply -ki, a particle to designate the object about which one is speaking: this enclosure here; this river here (5). 6. jíla-jíla, literally "one," means "one for each"; the repetition of the adverb háske háske has the value of a superlative; "far, far, very far"; Aymara and Kešwa form the superlative in an identical manner: eg.: Kala-Kala, "rock rock," in Aymara: "many rocks."

VII. The Village of the Uru at Iru-Itu
Comments on photographs by Manuel Inta

(See p. 164 /in the foreign text/)

Free Translation

*539
[346] 1. Is this your chapel? 2. It is our chapel. 3. These are our houses. 4. The chapel is seen from behind. 5. The chapel is good that way (seen from the front). 6. The totora [824] is kept upright in a heap. /181/ 7. It is kept in a heap so that it will not rot.

/181 cont. /

- *539
[501] it will not rot. 8. This is a balsa from the big lake. 9. Its prow is raised. 10. That one is a big balsa. 11. That one is a small balsa. 12. There are no other balsas. 13. This is a house of the other people (the Aymara). 14. This is a house of unburnt bricks (adobes). 15. This is a house of the Aymara community (lit., "of the other people"). 16. What more shall I tell thee? That is all. 17. Now I want to rest, oh father.

Remarks

- *539
124 This text reproduces the comments of old Manuel Inta, looking at a series of photographs of his native village, Iru-Itu, and of the region. The photographs of Iru-Itu were recognized without difficulty; those of less familiar sites provoked various reflections before being well identified (13-15).

- *539
193 1. xwí, interrogative particle; kapíla, this is the Spanish word capilla, "chapel." 4. We have not found any passive form among the Uru; to express the idea "has been seen from the back," the informant used the active voice: cèrk' - ku gi -

nís - čay, literally one he has seen; ku indicates the recent

past. It must be noted that this cast of mind was spontaneous, no question having been put to him; ɟ used in the text is an elision for i, "ohé," and has suffered a contraction with the previous vowel. 9. hoča expresses the idea of "point," being able to indicate as well as the raised prow of the balsa, a mountain summit, the nose, or the verb "to point" in the sense of being in a pointed form. 9-10-11. The narrator describes the three principal types of balsas of the Uru: with a raised, pointed prow for navigation on Titicaca (big lake); the big fishing balsas of the Desaguadero for three or four people, and the small balsas for one or two people. 13-15. tòxša, "others," or tòxša náka, /182/ "other people," the usual way to designate

[101]
[821]

/182 cont. /

- *539
[824] the Aymara used by the Uru, who consider themselves as constituting a pre-human species (not a race) apart. There are two human species, the Uru, a primitive species representing the first, pre-human creations, and the Aymara, who belong, as do all the other present-day people, to the last creation.
- *539
[192
[48] 15. Note a Hispanicism, humanidad, to designate the native community of Jesus de Machaca, upon which the Uru are now dependent; it is an idea which is foreign to their own sociology.
- [576] 16-17. The narrator, tired by his interpretive efforts, has no more to say and wants to rest. Note the polite form háp' - pay, "father," corresponding to "monieur."

*539
[824] VIII. Xoxi-cay, the Thunder
(Account by Carlos Kiske)

(See p. 166 /in the foreign text/)

Free Translation

1. It will still thunder very strongly; the storm is coming.
2. The roof of the house will let the water through; it is not good at all.
3. Look again to see if the storm is going away.
4. It is thundering again.
5. The thunder can only kill a person of another race.
6. Never, since the most ancient times, has the thunder killed one of us.
7. The thunder has made me very afraid.

Remarks

[824] This text makes allusion to a very deeply rooted belief among the Uru: they cannot be struck by lightning, so feared by all the populations of the altiplano. According to them lightning only strikes the people "of another race": Aymaras, half-breeds, or Europeans. Also the Uru do not have any

[pg 20 omitted in pagination.]

*539 /182 cont./ also The Uru do not have any
 81 apachete /piles of stones in the hills/, offering places /183/
 198 at spots struck by lightning, whereas these little monuments
 191 are very frequent among all the neighboring native populations.
 152 However, our informant, an Uru, Carlos Kiske, is very frightened
 182 of storms. The reason for this is undoubtedly that only the pure
 848 Uru enjoy this immunity, not bastards nor those of mixed blood.
 Now our informant, although part of the Uru group, was father-
 less, "hána hep' šeš- čay," "no father is," "an illegitimate
 son," a very frequent case, whose father is unknown. He did
 not at all insist on submitting to the test of lightning to be
 assured of his pure Uru ancestry. If an Uru is struck by thunder,
 drowned, or even dies of pneumonia -- dangers against which
 the true Uru are protected -- everyone sees it as indisputable
 proof of illegitimate and foreign paternity.

*539 From the point of view of vocabulary this text shows the
 191 same irregularities as the preceding text by the same informant
 192 (V) /see p. 15/ frequent elisions of final vowels: ča instead of
čay; the repeated use (1-7) of wáli, "much," an Aymara form
 not found in the texts nor in the numerous phrases gathered
 from the other informant. 2. wáli- píní, association of an
 Aymara word and an Uru word with the same meaning to rein-
 force the idea; we find an analogous case in ti- hún (5), the
 Uru-Spanish association already noted. 2. hána Kála ši čúña,
 "not good good is," association of two words of almost identical
 meaning to reinforce the idea: "this is not good at all." 3. The
 particle -kála after the verb "to go" has the exact meaning
 of ex in Latin, literally exit. 4. The correct form would be
war- pis. 6. háske indicates a very distant fact, an idea still
 more strengthened by the suffix -ta, sign of the past: "a very
 long time ago."

/184/

IX. Funeral Customs
(Account by Carlos Kiske)

(See p. 167 /in the foreign text/)

Free Translation

- [995]
[182] 1. We others, we have the custom of making a meal in honor of the soul. 2. We offer libations to the souls. 3. At night we have the custom of digging (the grave). 4. Then we have the custom of coming to burn (the clothes of the dead person). 5. We have the custom of burning the clothes of the soul. 6. Let us go burn these clothes. 7. Let us light the fire. 8. We burn only the clothes.

Remarks

In this short account the informant summarizes several funeral practices of the Uru. At first it is the evening of the funeral, during which relatives and friends eat in honor of the dead person (1) to whom libations of alcohol, chicha, and coca are offered (2). After the burial, without a coffin, in a simple ditch dug during the night (3), and which will not subsequently be marked by anything, the clothes of the dead person are burned.

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171 These practices are very different from those of the other natives of the Cordillera, speakers of Aymara or Kešwa, who gather several days after the burial to wash the dead man's clothes and divide them up. The customs of the Uru recall those of numerous Amazonian groups.

The complete abandonment of the grave after burial must also be noted; it contrasts with the care which other populations of the Cordillera give to graves.

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193 1. uċūmi; this is the personal pronoun of the first person plural, with the exclusive meaning "we others, the Urus."
[Text continues on p. 23]

291



1. Andrés Vilz and Luis Vilz.



Plate VI

2. Old Uru woman about 90 years old.

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3. Old Uru woman.

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K42
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4. Manuel Inta, 80 to 90 years old.



5. Carlos Kiske, Uru-Aymara, 40 to 50 years old.

Plate VII



6. Luis Inta, 40 to 50 years old.



7. Luis Inta, 40 to 50 years old.



8. Tomas Inta, 50 to 60 years old.



9. Tomas Inta, 50 to 60 years old.

181/

Uru. * Some authors (Pomocchi) have thought that ulimi was the same which the Uru gave themselves in their own language. Fray Antonio de la Calancha already spoke of them by the name of Ochusima. owli or owli designates the double of the person who lives on after the latter's death; our informant also uses the Spanish word alma (3). *the soul*; but he never used the word for defunct or dead, tihiwani-tay, literally, *that which is stretched out,* designating the corpse, which is not the object of any ceremony. 2. The verb pi-tai-tay means *to offer alcohol or chicha to a spirit*; here we have the imperative indicated by the prefix ta followed by the pure root. 3. Tait-ti designates clothes in general.

X. Conversation with the Two Informants:
Carlos Kipe and Manuel Jata

(See p. 168 for the foreign text/)

Free Translation

1. C. K.: These words which we have taught thee have tired us. 2. M. I.: My throat is dry from talking. 3. C. K.: [292] The coca is finished. 4. M. I.: There is no more coca at all.
5. C. K.: Give us some brandy. 6. Investigator: I shall give thee some. 7. M. I.: I shall drink, oh father (formula of politeness before drinking). They drink. 8. M. I.: [293] Be very alert, oh father (formula of politeness after drinking).
9. C. K.: [124] Thou hast made a picture of us two (C. K. and his wife) next to each other; thou wilt send it to us. 10. Investigator: Good, I shall send thee this picture; why dost thou ask for it? 11. C. K.: When my wife dies I shall look at her picture. 12. M. I.: Now we shall not say anything more to anyone.

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Remarks

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This little, very lifelike scene shows the usual difficulties in any ethnological investigation; the informants tire quickly, and the investigator is harassed by requests. Our two informants however were excellent.

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1. The suffix nāka indicates the plural; takú means "word," "speech," "language." 2. s- kō- čay is used for kō- čay, the s is euphonic; compare s- mūr- hāčay in 9. 4. A typical example of an adjective assuming a verbal form: wāka means "all"; by adding kičay, the past suffix, the word "all she has been," is formed. 5. awáritiš is the Spanish word, aguardiente, eau-de-vie /brandy/. 7. līka-čay, "I shall drink," formula of politeness before drinking. 8. hūwa means "quick," "lively," "agile," and in a figurative sense, "intelligent," "quick-witted"; here it is a wish used as a formula of thanking; háp'- pay, "father," a frequently used honorific used for "monsieur." 9. kę- skěču; the repetition of the first syllable of the word has the value of a superlative: "very, very close"; litrát is the Spanish word retrato, portrait.

[115]

11. The informant, about 60 years old, hopes very much to die after his wife, who is, however, less than 40 years old. I am not absolutely sure of the transcription of tíkš' na- tačíkni; it is a future form of dead, literally, "who is stretched out."

[191]

In this whole dialogue one will notice the rather different phonetics of the two informants. Thus čis- čay, "to talk," sometimes becomes či- čay; Carlos Kiske often leaves off endings in čay-; he even often leaves off final syllables or letters.

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XI. Farewells

(Dialogue dictated by Carlos Kiske)

(See p. 169 /in the foreign text/)

Translation

1. Dost thou not find it difficult to go away? 2. With much reluctance I shall go to my house. 3. Dost thou want to stay or dost thou want to leave? 4. I wish to go away.
5. Stay longer; it is better to stay now. 6. While thou travelest toward thy house, thou mightst meet a storm.
7. Eat thy meal; afterward thou shalt leave. Thy wife will be able to see thee from afar.

Remarks

We heard this short dialogue at Tihuanaco between our two informants, Carlos Kiske, who was staying with us, and old Manuel Inta, in a hurry to return home. Carlos Kiske repeated it to us. The usual mistakes of this informant are to be again found here: the use of wáli, an Aymara word meaning "much"; transformation of the ending čay into ča; frequent elisions.

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1. kún, an interrogative particle which is placed before the verb; compare kúmi-pèk' (5). Note the future forms -kičay, used in this whole dialogue, and tú lún táni, literally, "to take trouble." 2. kinák', a particle which is placed after the object, indicating direction with motion. 3. The Uru have no conditional or dubitative form; they present the two proposals without any conjunction. 4. káli, "from here"; a particle which is placed after the verb, indicating departure from the place where one is. 5. káma, a particle placed after the verb; it is common to Kečwa and to Aymara, meaning "whilst." 6. tstáni, a particle placed after the verb, meaning "after." 7. tstáni, a particle placed after the verb, meaning "after." 8. t' kúwa, a contraction; the correct form

/188 cont. /

*539
193 would be tukû- nua, "woman," "spouse." Note the placing of the particle âske, "far," between the root and the ending of the verb.

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121 It was interesting to publish these texts, which make possible some useful comparisons with Orés Pukina text, which will be the subject of our next note, and with Métraux's three Chipaya texts.

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[194] Considerable phonetic differences exist between Uru and Chipaya. For example, the ending çai, so characteristic of Uru but which already is tending to become ça or to be dropped, becomes ja in Chipaya. Chipaya pronunciation is much harder, with a greater frequency of gutturals, no doubt as a result of Aymara influence. The Chipaya vocabulary contains a much higher proportion of Aymara, Kešwa, and even Spanish words, and this does not originate solely from the nature of the texts gathered by Métraux: the trip of a Chipaya to Chile, and life in the barracks; one finds the same character in his second text, describing life in the fields. Outside this variable proportion of foreign words, differences in vocabulary are slight.

[193] The syntax of the two groups is identical, but nevertheless much less varied in Chipaya.

All this underlines the close linguistic affinities of these two groups. It is the same language, practically extinct, [184] spoken by two small, completely separated populations; it is better preserved among the Uru and more altered among the Chipaya, and already displays considerable variations from one generation to another within the same group.

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184 The differences are much more marked in the very content, rather than form, of the texts. The Uru mainly describe their work as fishermen and, to some extent, their customs. Métraux was able only with difficulty to obtain from the Chipaya a few phrases on their work /189/ in the fields and on animal husbandry, and his texts are mainly accounts of

/189 cont./

* 539 experiences outside of their daily life -- a trip to Chile or life
184 in the barracks.

* 539 Nothing better underlines the different character of these
181 two groups than these texts dictated by themselves. The
184 Chipaya are herders, very much affected by the influence of
[177] their Aymara and Kešwa neighbors, and even by the Creole
[178] culture. The Uru, fisher-gatherers, have kept almost up to
their extinction, their way of life and relative isolation,
which is reflected in their less altered language.

113

Principal Bibliographic References

1. Brinton, D.G. "Note on the Puquina language," Proceed. of the Amer. Philosophical Soc., XXVIII, 1890, 242-48.
2. Chamberlain, A.F. "The Uru, a new South-American linguistic stock," American Anthropologist, new series, XII, 1910, 417-424.
3. Créqui-Montfort and Rivet. "La langue Uru ou pukina /The Uru or Pukina Language/," Journ. Soc. Américanistes Paris, XVII, 1925, 211-244. Ibidem, XVIII, 1926, 111-139. Ibidem, XIX, 1927, 57-116.
4. Grasserie (Raoul de la). Langues américaines. Langue puquina. Textes puquina contenus dans le Ritualet... de Ore... Avec texte espagnol en regard, traduction analytique interlinéaire, vocabulaire et essais de grammaire /American Languages. Pukina Language. Pukina texts contained in the Ritualet... of Ore... With facing Spanish text, an analytical interlineal translation, vocabulary, and a trial grammar/. Leipzig, 1894.

/189 cont./

- 113 5. Métraux, A. "Les indiens Uro d'Angoaqui /The Uru Indians of Ancoaqui/", Journ. Soc. Américanistes Paris, XXVII, 1935, 75-110.
6. Métraux, A. "Les indiens Uro-Chipaya /The Uro-Chipaya Indians/", Journ. Soc. Américanistes Paris, XXVIII, 1931, 337-394.
7. Müller (Friedrich). "Die Puquina-Sprache des alten Inka-Reiches /The Pukina Language of the Ancient Inca Empire/", Globus, LXVI, 1894, 116.
8. Ore (Luis Gerónimo). Rituale, seu Manuale Peruanum, et forma brevis administrandi apud Indos sacramenta... Naples, apud I. Iacobum Carlinum et Constantinum Vitalem, 1607. (Copy of the Biblioteca Nacional de Lima).
9. Polo, J. T. "Indios Urus del Perú y Bolivia /The Uru Indians of Peru and Bolivia/", Bol. Soc. Geográfica, Lima, X, 1901, 445-482.

/190/

10. Posnansky, A. "La lengua Chipaya /The Chipaya Language/", XIX Congres internat. Américanistes, La Paz, 1914.
11. Posnansky, A. "Los Chipayas de Carangas /The Chipaya of Carangas/", Bol. Soc. Geográfica, La Paz, XVI, 1918, 137-145.
12. Posnansky, A. Antropología y Sociología de las Razas interandinas y de las regiones adyacentes /Anthropology and Sociology of the Inter-Andean Races and of the Adjacent Regions/, La Paz, 2nd edition, 1938.

/190 cont./

- 113 13. Uhle, M. "Ueber eine Reise in Bolivia /On a Trip in Bolivia/," Verhandlungen des Gesellschaft fuer Erdkunde, XXI, 1894, 328-332. Ibidem, XXIII, 1896, 357-360.
14. Uhle, M. "Bei den Uros in Bolivia /Among the Uru in Bolivia/," Globus, LXVI, 1894.
15. Uhle, M. "Ueber die Sprache der Uros in Bolivia /On the Language of the Uru in Bolivia/," Globus, LXIX, 1896.
16. Villar, L. "Linguística Nacional. Lenguas coexistentes con la Keshua /National Linguistics. Languages co-existent with Quechua/," Bol. Soc. Geográfica de Lima, V, 1895-96, 317-350.

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Note II

Anthropology

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141. When we examined the anthropological bibliography at our disposal, we found only a very small number of works on the Uru and the closely related Chipaya: publications by Imbelloni and Posnansky and a note by Wright on dental anomalies. No important work should have escaped our notice.

Imbelloni made a very complete study of two skulls from the island of Panza (Poopo Lake, 300 kilometers from Lake Titicaca, fed by the Desaguadero), classifying them in the Laguido-Melanesien group.

Posnansky has made a very summary study (only a few cephalic measurements) of six men of Iru-Itu. He completed this series by examining nine Chipayas, men, only seven of whom would be pure-blooded; the other two, brachycephalic and mesaticephalic, are considered "Kollas," i.e., half-breeds of Andean elements. On the island of Panza, Posnansky studied two skulls and measured the cephalic index of six living people, four men and two women, only one of whom is called "pure Uru." These results are compared with those furnished by a small series of Chango skulls coming from the Arica excavations. It is necessary, of course, to make reservations about Posnansky's very personal nomenclature and the very special meaning which he gives to Arawak and Kolla terms.

It was not possible for us to consult Wright's work, which seems to deal with a very different aspect from that which interests us.

Imbelloni and Posnansky agree on the very marked dolichocephalism of the Uru and their relatives, the Chipaya. The conclusions which issue from a comparative study /192/ of their works are much less clear in connection with the vertical index of the skull and the height of the face.

/192 cont./

114 Outside of Posnansky's small Chipaya group, no information exists on height or body measurements in these groups to our knowledge.

126 We ourselves prepared only a very short series: six men and three women, all adults. The fact that we are dealing with the last Uru must not be forgotten. Outside these nine subjects, there were no other Uru adults at Iru-Itu other than a young Uru woman about 30 years old and two very old women whom it was impossible to measure and who allowed themselves to be photographed only with difficulty. The children were largely Uru-Aymara half-breeds. The consanguinity of most of our subjects is another inconvenience of this small series.

121 In spite of these defects it seemed necessary to us to publish our results, which allow useful comparisons with the works of Posnansky and Imbelloni and will without doubt be the last observations on this group. Some other Uru are scattered in the region and already incorporated into the Aymara populations; their affiliation will be difficult to establish.

114 It is regrettable that the ethnographers who visited the region when the Uru were still numerous did not seek to obtain a few essential anthropometric measurements. However, it must be recognized that working conditions were not very favorable; the Uru proved to be opposed to any examination of this type, and the cold climate as well as their heavy, woolen garments were also obstacles difficult to overcome. Patient negotiations were necessary, for example, in order to get some of them to allow themselves to be photographed without their woolen caps, and most refused.

162 /193/ In 1942 the population of Iru-Itu was as follows:
--- 6 men, whose ages varied between 40 and 95 years.
--- 6 women between 30 and 90 years old.
--- 9 children, 5 boys and 4 girls, between 4 and 15 years old.

/193 cont. /

162 Besides these 21 subjects, who considered themselves as pure Uru, three Aymara women living with some Urus had settled in the village with five children.

829 The concept of pure Uru is completely arbitrary;
597 its value is more social than racial. At all times adoption in
648 various forms made the incorporation of a subject of another origin into the group possible, and he was from then on considered a true Uru. This was the case with an Aymara child, [128] whom we, of course, dropped from our list.

829 Children of an Uru mother and an unknown father were considered pure Uru.

One of our informants, Carlos Kiske, was himself, as we have seen, a "without father." Although considered an Uru, all his physical and mental characteristics clearly distinguished him from the other members of the group.

The Uru considered Aymara women born in neighboring villages and their children, even if born of Uru fathers, as foreigners. This matrilineal law is interesting to note.

126 Aymara women refused to let themselves or their children be examined. Nothing could persuade the two old Uru women.

We were hence reduced to the nine following subjects:

Men

142 Manuel Inta. An old patriarch 80 to 90 years old, born of Uru father and mother. White, rather thick hair; beard reduced to a few short hairs, entirely white. Thin lips; a straight-nosed profile. No Mongolian fold, /194/ but the presence of a malo-marginal fold, very distinct, on the far part of the eyelid.

[163] Four living sons, Tomas and three others who have left the village; three daughters, among them Andréa and Célestina, and four dead children.

Tomas Inta, 50 to 60 years old, Manuel's son. Considered pure Uru. No white hair. Thin lips, straight nose. Very marked malo-marginal fold.

/194 cont./

[42] Luis Inta, 40 to 50 years old, Manuel's nephew. Considered pure Uru: Thin lips. A moderately convex nose, with enlarged alae. Malo-marginal fold present.

Andrés Vila, 90 to 95 years old. Born of Uru father and mother. He is the oldest man in the village. A deeply wrinkled face. Plentiful white hair. A few beard hairs, short and completely white. Straight nose, very depressed at the base. Thin lips. Very marked malo-marginal fold.

[41] Luis Vila, 80 to 90 years old. Tall, 174 cm., contrasting with the other members of the group, of medium height. Born of Uru father and mother. Some white hair. Some beard hair, short and white. Relatively large head. Slightly convex nose. Not very accentuated malo-marginal fold.

[44] Carlos Kiske, 40 to 50 years old. Born of Uru mother but of unknown father, he shows unquestionable signs of crossbreeding with elements of Andean race. Brachycephalic, strongly [41] hypsiccephalic, euryprosopic, and mesatiskelic, he clearly stands apart from the other members of the group. His much more active nature and his more lively type of intelligence accentuate this difference still more. Straight nose, malo-marginal fold present.

Women

[163] Santusa Inta, 30 to 35 years old, niece of Manuel Inta (?), considered a true Uru. An attractive, energetic person. Low forehead, straight nose, depressed at the base. A well-marked malo-marginal fold. Four children, nine to 15 years old.

Celestina Inta, 35 to 40 years old, daughter of Manuel Inta, considered /195/ as pure Uru. An agreeable, energetic person. Moderately convex nose. Accentuated malo-marginal fold.

Andrea Inta, 40 to 50 years old, daughter of Manuel Inta, considered true Uru. Coarser type than the previous ones.

/195 cont./

- 42 Nose depressed at the base, a slightly convex profile. A very accentuated malo-marginal fold.

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List of the Population

Uru men:

Manuel, Inta, 80 to 90 years old.

Tomas Inta, 50 to 60 years old, Manuel's son.

Luis Inta, 40 to 50 years old, Manuel's nephew.

Andrés Vila, 90 to 95 years old.

Luis Vila, 80 to 90 years old.

Carlos Kiske, 40 to 50 years old (characteristics of an Uru-Aymara half-breed).

Uru women:

Santusa Inta, 30 to 35 years old, Manuel's niece.

Célestina Inta, 35 to 40 years old, Manuel's daughter.

Andréa Inta, 40 to 50 years old, Manuel's daughter.

Justina Vila, 30 to 35 years old.

X , 80 to 90 years old.

Y , 80 to 95 years old.

Uru children:

Francisco Inta, masc., 14 to 15 years old, Santusa's son.

Sabina Inta, fem., 12 to 13 years old, Santusa's daughter.

Angelita Inta, f., 11 to 12 years old, " "

Jesus Inta, m., 9 to 10 years old, Santusa's son.

Juliana Vila, f., 5 to 6 years old, daughter of Justina Vila and Luis Inta.

Esteban Vila, m., 4 to 5 years old, son of Justina Vila and Luis Inta.

Francisca Vila, 3 to 4 years old, daughter of Justina Vila and Luis Inta.

/196/ Miguel Salinas, m., 4 to 5 years old, orphan.

Miguel Kiske, m., 5 to 6 years old, half-breed, son of Carlos Kiske.

/196 cont. /

162 Aymara women:
551

Rosa Choque, 60 to 70 years old, Aymara from Machaca.
Francisca Arosquipe, 40 to 50 years old, Aymara from
Guaqui.

María Chura, 40 to 50 years old, Aymara from Guaqui.

Half-breed children:

Victor Inta, m., 10 to 11 years old, son of Luis Inta and
an Aymara woman.

Eugenio Inta, m., 8 to 10 years old, son of Luis Inta and
an Aymara woman.

Ramon Inta, m., 2 years old, son of Luis Inta and an
Aymara woman.

Manuela Inta, f., 3 years old, daughter of Luis Inta
and an Aymara woman.

Domitilia Tacon, f., 6 years old, adopted Aymara.

162 Total:

6 Uru men, from 40 to 95 years old (one of whom is
certainly of mixed blood).

6 Uru women, from 30 to 95 years old.

9 Uru children, 5 boys and 4 girls, from 4 to 15 years old.

3 Aymara women.

4 Uru-Aymara half-breed children.

1 adopted Aymara child.

[125] The age of all these subjects was, of course, estimated
approximately. Even the relationship of several of them is
doubtful.

164 One of the children of mixed blood, Victor Inta, was
struck by typhus exanthematicus.

161 This list shows the deep decline of the group. In 1938
62 there were four patronymic names, those of the four big
62 families in Iru-Itu: the Inta, the Vila, the Kiske, and the
551 Salinas. In 1942 the Salinas /family/ had emigrated or
disappeared, leaving only an orphan. The Kiske /family/

/197/

161 was represented only by Carlos and his son. Two men, a
162 young woman, and her children formed the Vila group. The
621 Inta family was the only still rather numerous one. It has,
moreover, always been considered the most traditional and
purest of the Iru-Itu families.

Anthropometric Study

128 We had to limit our study to the essential measurements
141 of the head and body.

The results obtained are contained in Tables I and II and
the indices calculated in Table III /see pp. 38-40/.

These figures call for some comments.

In spite of the small number of subjects examined, the
results are rather homogeneous for the group of men, with the
exception of Carlos Kiske who is considerably far from the
general type. The group of women presents marked differences
from that of the men. It is quite difficult to judge to what
extent these differences are due to a pronounced sexual
dimorphism or to the influence of possible crossbreeding,
which makes itself felt among close relatives, two sisters and
their female cousin.

We will study the male and female groups separately.

Head

141 The absolute measurements show a notably elongated
head for all the subjects examined; the outside figures go from
187 to 210 for the men and from 178 to 180 for the women.
The head is narrow among the men, 141 to 150, with the
exception of Carlos Kiske; among the women the absolute values
do not exceed 149.

The cephalic index does not exceed 75.0 for the
masculine groups; only Carlos Kiske is hyperbrachycephalic

/197 cont./
141 with 85.5. The three women are moderately brachycephalic. The arithmetical average for the five first /198/ /Table I appears here/ /199/ /Table II appears here/ /200/ /Table III appears here/ /Plates VIII and IX appear here/ /201/ men is: 73.51 and for the women: 81.96. Posnansky's figures indicate an average index of 72.7 for the Uru and 75.0 for the Chipaya. Imbelloni gives 72.77 for a male Uru skull and 73.71 for a female one.

The auricular height of the skull varies within rather large limits, 115 to 133 for the group of the first five men, with an average of 128.60. It is a little less strong among the women (average 120). Carlos Kise again stands out from the whole group with 163 mm. The division of the skulls according to their height is the following (after Scheidt):

Low -- x-118: 1 man, 2 women.

Medium -- 119-128: 2 men, 1 woman.

High -- 129-x: 3 men (one of whom is Carlos Kise).

The height-length index indicates only one male orthocephalic skull with a value of 60.5; all the other skulls are hypsicephalic, those of the men varying from 63.3 to 70.7 (average: 64.54) and those of women from 64.6 to 70.5 (average: 66.86). Carlos Kise reaches 87.1.

The height-width index allows only one female skull to be classified as tapeinocephalic; one male and one female as metriocephalic; all the others are acrocephalic, with indices from 86.9 to 94.3, with the exception of Carlos Kise, who is conspicuous for his considerable height, reaching 101.8; the general average for the men (excepting C. Kise) is 87.9, and for the women 81.6.

Tapeinocephalic: 75.0-79.9: 1 woman.

Metriocephalic: 80.0-84.9: 1 man and 1 woman.

Acrocephalic: 85.0-X: 5 men and 2 women.

The forehead is medium for three men (Minimum frontal diameter: 104 to 108), large for two men (115-119) and the three women (115-118); only one man is in the category of

[Text Continues on P. 43]

I. Head

Name:	Manuel Inta	Tomas Inta	Luis Inta	Andrés Vila	Luis Vila	Carlos Kispe	Andres Inta	Celestina Inta	Santusa Inta
Sex	m.	m.	m.	m.	m.	m.	f.	f.	f.
Approximate age . . .	80/90	50/60	40/50	90/95	80/90	40/50	40/50	35/40	30/35
Ant. post. diam. . .	188	190	195	195	210	187	180	180	178
Max. trans. diam. . .	141	142	146	141	150	160	146	146	149
Auriculo-vertical height	133	115	127	125	133	163	127	118	115
Min. frontal breadth .	107	108	104	115	122	119	118	115	115
Bimastoidian diam. .	132	125	132	132	133	132	126	118	125
Bizygomatic diam. .	141	138	141	139	150	144	139	138	142
Bigonial diam. . . .	103	113	98	110	120	106	106	104	95
Phys. face height . .	183	178	197	186	214	176	163	173	156
Nasio-mental diam. .	123	126	123	120	133	118	112	120	115
Nasio-buccal diam. .	78	81	82	82	84	76	66	78	73
Nasio-alveolar diam.	67	73	72	68	74	68	62	69	68
Nose height	53	58	60	55	59	53	47	55	53
Nose breadth	36	36	38	42	40	37	35	37	39
Projection, base of nose	19	24	21	22	22	20	19	18	19
Bipalpebral, ext. diam.	94	100	92	97	102	105	94	95	93
Bipalpebral, int. diam.	31	31	31	35	38	37	35	36	36
Mouth breadth	54	55	60	57	54	56	58	45	52
Bilabial height	21	18	23	21	26	19	18	21	22
Height	67	61	65	70	70	66	58	57	52
Height of cartilaginous ear	56	47	50	59	58	55	47	46	42
Ear breadth	37	43	37	41	38	37	31	26	29
Head circumference . .	—	527	550	548	590	572	—	—	—

II. Body

Name:	Manuel Inta	Tomas Inta	Luis Inta	Andrés Ylla	Luis Vila	Carlos Kispe	Andrea Inta	Celestina Inta	Santusa Inta
Sex	m.	m.	m.	m.	m.	m.	f.	f.	f.
Approximate age . . .	80/90	50/60	40/50	90/95	80/90	40/50	40/50	35/40	30/35
Standing height . . .	1501	1586	1648	1556	1740	1665	1532	1572	1550
Auditory meatus height	1368	1471	1521	1431	1667	1502	1405	1454	1435
Chin height . . . . .	....	1370	....	....	....	1391	....	....	....
Sitting height	739	806	791	791	906	881	794	813	772
Acromion height . . .	1265	1325	1346	1277	1485	1315	1259	1297	1272
Large trochanter height	....	....	....	....	....	773	....	....	....
Elbow height . . . . .	....	1018	1020	923	1100	999	956	990	951
Wrist height . . . . .	....	777	771	700	849	786	737	762	747
Middle finger height .	....	610	585	514	658	626	578	591	600
Knee height . . . . .	....	410	446	460	433	430	417	432	450
Ankle height . . . . .	....	68	70	67	66	76	60	66	52
Total span	1590	1635	1708	1619	1744	1619	1547	1611	1569
Biacromial diameter .			318			239	307	288	308
Bihumeral diameter . .						390			

3:Vellard--39 D.E-5 (1938-1944) 1949 SF24 Urn SF24

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III. Indices

Name:	Manuel Inta	Tomas Inta	Luis Inta	Andrés Vila	Luis Vila	Carlos Kispe	Andrea Inta	Celestina Inta	Santora Inta
Sex	m.	m.	m.	m.	m.	m.	f.	f.	f.
Approximate age . .	80/90	50/60	40/50	90/95	80/90	40/50	40/50	35/40	30/35
Cephalic index . . .	75.0	74.7	74.8	72.3	71.1	85.5	81.1	81.1	83.7
Height-length index .	70.7	60.5	65.1	64.1	63.3	87.1	70.5	65.5	64.6
Height-breadth index	94.3	80.9	87.1	88.6	88.6	101.8	86.9	80.8	77.1
Facial physiognomic index	129.7	128.9	139.7	133.8	142.6	122.2	117.2	125.3	109.8
Facial morphological index	87.2	91.3	87.2	86.3	88.3	81.0	80.5	86.9	80.9
Upper facial morpholog. index	47.5	52.8	61.0	48.9	49.3	47.2	44.2	50.0	41.8
Nasal index	67.9	62.0	63.3	76.3	67.7	69.8	71.4	67.2	73.5
Nasal projection index	52.7	66.6	55.2	52.3	55.0	54.0	54.2	48.6	48.7
Frontoparietal index .	75.8	76.0	71.2	81.5	81.3	73.1	80.8	78.7	77.1
Frontozygomatic index	75.8	78.2	73.7	82.7	81.3	81.2	84.8	83.3	80.9
Goniozygomatic index	73.0	81.8	69.5	79.1	80.0	73.6	76.2	75.3	66.9
Goniofrontal index .	96.2	104.0	94.1	95.6	98.3	89.0	89.8	90.4	82.6
Labiofacial index . .	17.0	14.2	17.8	17.5	19.5	16.1	16.0	17.5	19.1
Biorbital index . . .	32.9	31.0	33.6	36.0	37.2	32.3	37.2	37.8	38.7
Auricular index . . .	55.2	70.4	56.9	58.5	54.2	56.0	53.4	45.6	55.3
Cormic index	50.9	50.8	47.9	51.1	52.0	52.9	51.8	51.7	49.7
Height-upper limb index	—	19.2	19.7	22.8	22.1	18.9	19.7	19.5	20.7
Height-span index .	94.4	97.0	96.4	96.1	99.7	102.8	99.0	97.5	91.7

PL. VIII

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10. Luis Vila. 80 to 90 years old.



11. Luis Vila. 80 to 90 years old.



12. Andrés Vila. 90 to 95 years old



13. Andrés Vila. 90 to 95 years old.

Plate IX

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14. Santusa Inta, 30 to 35 years old.



15. Santusa Inta, 30 to 35 years old.



16. Andres Inta, 40 to 50 years old.



17. Celestina Inta, 35 to 40 years old.

/201 cont. /

- 14| very large foreheads (Luis Vila, with 122). The frontoparietal index varies among the men from 75.8 to 81.5 (average: 77.16), with /202/ the exception of Carlos Kiske, for whom it is only 73.1; and among the women it varies from 77.1 to 80.8 (average: 78.86).

The face is of average height among the men (nasio-mental diameter): 118 to 126; average: 122), with only one exception, Luis Vila, who reaches 133 mm. Two of the women have short faces, 112 and 115 mm.; it is medium for the third: 120 mm. The general average is 123.8 for the men and 115.6 for the women.

Absolute values for the bizygomatic diameter classify both men and women among faces of medium size, bordering on faces of large size.

4 men and 2 women: 138 to 141.

2 men and 1 woman: 142 to 150.

Average: men, 142.1; women, 139.6.

The morphological facial index of the first five men tends toward leptoprosopy (average index: 88.06, with the exception of Carlos Kiske, who is clearly chamaeoprosopic with 81.9).

The women are chamaeoprosopic; average 82.7:

Chamaeoprosopic: x-83.9: 1 man and 2 women.

Mesoprosopic: 84.0-87.9: 3 men and 1 woman.

Leptoprosopic: 88.0-92.9: 2 men.

The upper facial morphological index does not change these results much:

5 men (without Carlos Kiske): 47.5 to 61.0; average: 51.90.

3 women: 41.8 to 50.0; average: 45.33.

Carlos Kiske again has a slightly lower index than the other men: 47.2.

The absolute values of the nasio-buccal diameter are high, ranging from 78 to 84 for the first five men, with an arithmetical average of 81.0. Carlos Kiske reaches only 76; the three women range from 66 to 78 with an arithmetical average of 72.3.

/202 cont. /

141

The bigoniac diameter is rather high:

5 men (without C. Kiske): 98 to 120; average: 108.80.

3 women: 95 to 106; average: 101.66.

/203/ Here C. Kiske with 106 is not very far from the average value.

The gonio-zygomatic index for the men varies from 69.5 to 81.8 (arithmetical average: 76.68; C. Kiske: 73.6), and for the women from 66.9 to 76.2 (average: 72.80).

The bigoniac diameter for the first five men is slightly lower than the minimum frontal diameter, which it exceeds only once (Tomas Inta). C. Kiske has a much narrower jaw, as do the three women: the goniofrontal index is lower than or equal to 90.

5 men: 94.12 to 104.02; average: 97.68.

C. Kiske: 89.07.

3 women: 82.60 to 90.40; average: 87.6.

For three of the men, including C. Kiske, the nose is of medium height; it is high on one subject, and two of the others are in the very high-nosed category. 2 women are medium; only one has a very low nose.

Very low nose: x to 49 ... 1 woman.

Low nose: 50 to 52 —

Medium nose: 53 to 55 3 men, 2 women.

High nose: 56 to 58 1 man.

Very high nose: 59 to x ... 2 men.

The absolute figures put the Uru nose in the large-nose category; two men have very large noses:

36 to 39 mm.: 4 men, 3 women.

39 to x mm.: 2 men.

The arithmetical average for the men is 38.1 and for the women 37.0.

The men are leptorrhinians except for one, a mesorrhinian; two women are mesorrhinians, and one is leptorrhinian.

/203 cont. /

141

Nasal index:

55 to 69.9: 5 men, 1 woman.

70 to 84.9: 1 man, 2 women.

The general average 67.8 for the men and 71.7 for the women places the Uru among the leptorrhinians, on the mesorrhinian border. /204/ The width of the palpebral slit varies from 30.5 to 34.5 among the men, with 32.2 for the arithmetical average. It is shorter among the women, varying from 28.5 to 29.5 (average: 29.1).

The mouth is of average breadth (56 in a man and 51.6 for a woman); the lips are very thick.

Breadth of the mouth:

6 men: 54 to 60 mm.; arithmetical average: 56.0.

3 women: 45 to 58 mm.; average: 51.6.

Bilabial height:

6 men: 19 to 22; average: 21.1.

3 women: 18 to 22; average: 20.3.

The labiofacial index varies from 14.2 to 19.5 among the men (arithmetical average: 17.0), and from 16 to 19.1 among the women (average: 17.5), which underlines the considerable height of the lips.

The ear, which is very long for the men (61 to 70 mm.; arithmetical average: 66.5 mm.), is short for the three women studied: 52 to 58, average 55.6. It is wide in a man (37 to 41 mm., average 38.8), and narrow in a woman (26 to 31 mm., average 28.6).

The auricular index varies in general among the men from 54.2 to 58.5, with one exception (70.4); for the women our figures were 45.6 to 55.6, which emphasizes the narrowness of the ear relative to its height.

General arithmetical average:

Men: 58.5.

Women: 51.4.

/204 cont. /

141

Stature and limbs:

The small series studied appears very heterogeneous in stature. The men range from small to large in stature, with a predominance of small and medium; two women are medium and one above medium.

Men. — Short: x to 159.9: 3 men.

Below medium height: 160 to 163.9: —

/205/ Medium height: 164 to 166.9: 2 men.

Above medium height: 167 to 169.9: —

Tall: 170 to 179.9: 1 man.

Women. — Medium height: 153 to 155.9: 2 women.

Above medium height: 156 to 158.9: 1 woman.

[14]

These figures compare with the small series of four Uru measured by Posnansky, which is the sole information, to our knowledge, published up to now on this group; this series notes 1 short, 1 medium, 1 above medium, and 1 tall man.

Among the Chipaya, related to the Uru, Posnansky's figures for a series of nine men note six short, two below medium, and one above medium.

These three series: our six Uru men and three Uru women; Posnansky's four Uru men and nine Chipaya men are distributed in the following fashion:

Short: 10 men.

Below medium height: 2 men.

Medium height: 3 men, 2 women.

Above medium height: 2 men, 1 woman.

Tall: 2 men.

Of these 22 individuals, 45.45% are short; 31.72% are below medium and medium; 13.63% are above medium; only 9.0% are tall.

The three series agree with each other, which emphasizes the frequency of short and medium heights among the Uru and their relatives the Chipaya.

The cormic index furnishes more homogeneous results. Of the first five men, three are macroskelic and two meroskelic.

/205 cont. /

141 C. Kiske is again an exception, falling at the border of the breviskelic. The three women are macroskelic.

Macroskelic Men, x-51.0: 3 men.

Women, x-52.0: 3 women.

Meroskelic Men, 51.1-53.0: 3 men.

The extreme values for the men range from 47.9 to /206/ 52.0 (or 52.9, counting C. Kiske). The arithmetical average, even with C. Kiske, underlines the macroskelicism of the group; 50.91; when not counting this half-breed element, it falls to 50.52. The female average is 51.06.

The span among the men as well as the women is greater than stature. The arithmetical average for this difference is 5.3 c. for the first five men and 2.4 c. for the women.

C. Kiske, in contrast, is of a stature greater than his span by 4.6 c. The height-span index is below 100, except for Carlos Kiske.

5 men (without counting C. Kiske: 94.4 to 99.8.

Arithmetical average: 96.58.

Carlos Kiske: 101.0.

3 women: 97.5 to 99.1. Arithmetical average: 98.46.

The relation of the upper limb to stature varies from 41.3% to 49.3% among the men, with an arithmetical average of 45.8%, and from 42.3% to 44.4% among the women with an average of 43.3%.

Hematological Studies

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143 To complete this work, and in spite of the small number of subjects, we studied the blood groups of all the inhabitants of Iru-Itu, without taking into account origin or degree of relationship. Only the two old women refused to undergo this examination.

Our investigation thus dealt with 27 subjects:

6 Uru men;

4 Uru women;

/206 cont. /

126
143 9 Uru children;

3 Aymara women;

5 Uru-Aymara and Aymara children.

The blood, obtained by pricking the ear lobe and placed in an oxalate physiological solution, was examined two days later in the laboratory. Two standard serums /207/ were used, a Brazilian serum and one from La Paz. The results were checked by microscope.

143 The results were uniform. All the individuals belong to group O, which once again emphasizes the preponderance of this group in South America.

We established the leucocytic formula for three men, Manuel Inta, Andrés Vila, and Carlos Kiske:

Manuel Inta: lymphocytes: 29%; large mononuclears: 6%; neutrophils: 65%.

Andrés Vila: lymphocytes: 51%; large mononuclears: 5%; eosinophiles: 3%; basophiles: 1%; neutrophils: 40%.

Carlos Kiske: lymphocytes: 28%; large mononuclears: 7%; eosinophiles: 1%; neutrophils: 64%.

We were able to make a globular count, completed by an erythro sedimentation, for only one subject, Manuel Inta:

Red globules: 4,900,000; leucocytes: 8,300.

Erythro sedimentation: 1 hour 3:5; 2 hours 13; 24 hours 60.

Red globules: 57%; plasma: 43% (after centrifugation).

Time of coagulation (capillary tube): 7 to 8 minutes.

Hemoglobin: 97% (Hellige's micro-comparator).

This single observation and the advanced age of Manuel Inta make the interpretation of the results difficult. It must be emphasized that the normal number of red globules in La Paz is from 6,000,000 to 6,500,000. The reduction observed coincides with extreme slowness of sedimentation.

Lastly, we conducted a Kahn reaction on the same subject:

Kahn Standard: +

Original Kahn: $\frac{+}{2}$ + +

/207 cont. /

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Kline: ++

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We shall only conclude from this isolated observation /208/ the existence of possible heredosyphilis or of a very attenuated syphilis in one of the most conservative members of the group, who always severely condemned sexual relations with other natives as being against the traditions.

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These few isolated examinations have no great significance; they do emphasize however the interest which a numerous series of hematological and serological investigations among the isolated native groups of the Cordillera or the South American forests would have.

Conclusion

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In spite of the small number of subjects examined (9), owing to the rapid decline of the group and its approaching extinction, this study of the last Uru of Iru-Itu permits us to make a few interesting conclusions.

[171]

Height varies little from that of the neighboring Andean populations, and small and medium stature predominate. The population is as a whole macroskelic.

The cephalic index among the men who can be considered as not crossbred with the neighboring populations is lower than 75.0% (average: 73.51). Three women are moderately brachycephalic; we must note that they are closely related.

Dolichocephaly, a tendency to leptocephalia and to leptoprosopy, the bigoniatic diameter almost equal to the minimum frontal diameter, leptorrhinism, a high and narrow ear succeed in characterizing this group.

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As a whole these results agree with the few previous observations on the Uru and the Chipaya (Imbelloni's two Uru skulls; a few measurements by Posnansky), emphasizing the morphological unity of these two groups.

/208 cont. /

144 The Uru belong to the old American Lagoa Santa dolichocephalic base with an elevated skull. It is however more difficult to include them in one of Imbelloni's two groups, Láguido or Fuéguido, as /209/ this author has more-over emphasized. If on the one hand, as he indicates, "the Uru faithfully reproduce the Láguido race as far as the neural skull is concerned" because of their pronounced dolichocephaly, the height of the vault of the skull, and the brainpan formed like a roof with marked lophos /crest/, they approach the Fuéguido type, in contrast, through the height of the face, the height of the nose, leptorrhinism, and leptomorph characteristics foreign to true Láguidos.

These mixed characteristics place the Uru between the true Melanesian Láguidos and the Australoid Fuéguidos.

To what extent could this be due to a possible crossbreeding of an originally Láguido type with elements of another origin, perhaps Fuéguido, as Imbelloni seems inclined to believe? Or is it, on the contrary, a question of a certain variability of the Melanesian-Láguido type?

These problems present themselves not only with regard to the Uru, but also for other dolichocephalic American peoples. They underline the significance of study of the last dolichocephalic groups of the continent before their complete extinction.

Bibliography

- 113 Imbelloni, J. "Sobre craneología de los Uru. Supervivencia de razas australoides en los Andes /On the Craniology of the Uru. Survival of Australoid Races in the Andes/." 27th Congrès Internat. Américanistes. Lima, 1939, I, 3-19 (1942).

/209 cont./

- 113 Imbelloni, J. "I popoli recogletori dello scudo brasiliano della Foresta e del Chaco, gli Australi ed i marginali del Pacifico /The Forest and Chaco Peoples under Brazilian Protection, The Australians and the Marginal Peoples of the Pacific/." In Razze e Popoli della Terra /Races and Peoples of the Earth/, R. Biasutti, Torino, 1941, III, 587.

Posnansky, A. Los Chipayas de Carangas /The Chipaya of Carangas/, La Paz, 1918.

Posnansky, A. Antropología y Sociología de las razas interandinas y de las regiones adyacentes /Anthropology and Sociology of the Inter-Andean Races and Those of Adjacent Regions/. 2nd edition. La Paz, 1938.

Wright, H.B. "Antropologic aspects of dento-facial deformities." Amer. Journ. of orthodontic and oral Surgery, 1939, XXV, 218-234.

[For a sample of Uru language texts with a literal French translation, see 3: Vellard, this file, category 116, foreign text, pp. 151-169.]

[For an analysis of Uru language texts consisting of a free translation, a cultural commentary, and linguistic notes, see category 116, pp. 7-27.]